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UTILITY PATENT APPLICATION TRANSMITTAL

((Only for new non-provisional applications under 37CFR 1.53 (b))

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APPLICATION ELEMENTS
See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: **Assistant Commissioner for Patents**
Box PATENT APPLICATION
Washington, DC 20231

1. ☒ Fee Transmittal Form
(Submit an original, and a duplicate for fee processing)

2. ☒ Specification [*Total Pages* 14]
(preferred arrangement set forth below)
- Descriptive title of the Invention
- Cross References to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to Microfiche Appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings *(if filed)*
- Detailed Description
- Claim(s)
- Abstract of the Disclosure

3. ☒ Drawing(s) *(35 USC 113)* [*Total Pages* 3]

4. ☒ Oath or Declaration [*Total Pages* 2]
a. ☒ Newly unexecuted (original or copy)
b. ☐ Copy from a prior application (37 CFR 1.63 (d))
(for continuation/divisional with Box 17 completed)
[Note Box 5 below]
i. ☐ DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63 (d) (2) and 1.33 (b).

5. ☐ Incorporation by Reference *(useable if Box 4b is checked)*
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

6. ☐ Microfiche Computer Program *(Appendix)*

7. ☐ Nucleotide and/or Amino Acid Sequence Submission *if applicable, all necessary)*

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ACCOMPANYING APPLICATION PARTS

8. ☐ Assignment Papers (cover sheet & document(s))

9. ☐ 37 CFR 3.73 (b) Statement *(when there is an assignee)* ☐ Power of Attorney

10. ☐ English Translation Document *(if applicable)*

11. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations

12. ☐ Preliminary Amendment

13. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)

14. ☐ Small Entity Statement(s) ☐ Statement filed in prior application, Status still proper and desired

15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)

16. ☒ Other Patent Cover Sheet

17. **If a CONTINUING APPLICATION**, check appropriate box and supply the requisite information:
☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No:

18. CORRESPONDENCE ADDRESS

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Signature	Jeanette Pritchett	Date	December 22, 1999

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Docket No. 24180-667000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION FOR UNITED STATES LETTERS PATENT

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ALL BEING A CITIZENS OF THE UNITED STATES OF AMERICA

TITLE: **MULTILAYER FILM STRUCTURES HAVING IMPROVED SEAL AND TEAR PROPERTIES**

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MULTILAYER FILM STRUCTURES HAVING IMPROVED SEAL AND TEAR PROPERTIES

Background of the Invention

The present invention relates to multilayer film structures having improved seal and tear properties. Specifically, the film structures of the present invention can be used alone or laminated to another film or a packaging film component thus forming a package, which contains a product. The film structures of the present invention are particularly useful for packaging of flowable materials including but not limited to condiment packaging.

Packages for enclosing products are usually made by forming a polymeric film into a shape to accommodate the product, placing another polymeric film over the product and then heat sealing the film together to maintain the product within the two film structures. Packages for products may also be made by forming a polymeric film into a pouch, heat sealing closed all but one of the open edges, filling the pouch with a product, and then heat sealing closed the one open edge. Both of these generally described processes for making packages are known in the art. The packages made from the above-described processes can have problems in their heat sealing properties and if the package is intended to be opened by a consumer, in their tear properties. These problems are especially acute if the package, which contains a flowable material, is intended to be opened by a consumer wherein a combination of good seal and good tear properties are necessary.

In forming heat seals in packages, especially packages for flowable materials, two films (i.e., a film and another film or two portions of the same film) are brought together, and then sufficient heat and pressure are applied to fuse or seal the films together. Colorants are added to packaging film structures to provide a more aesthetically pleasing package or to provide a background for printed material. If the film is a multilayer film, then the colorant is blended with one or more layers of the film, and specifically the colorant is blended with a polymeric material which comprises a layer or layers of the film structures.

Packages, especially packages for the containment of flowable materials, need good seal properties and good tear properties. Good seal properties are necessary to insure that

the flowable material does not leak from the package. Good tear properties are necessary to insure that the package can be opened easily by the consumer without tearing through the entire package causing spillage of the flowable material.

U.S. Patent 5,879,768 and U.S. Patent 5,360,648 both to Falla, et al. disclose pouches for packaging flowable materials. In particular, a pouch made from a monolayer or multilayer film structure such as a two-layer or a three-layer coextruded film is disclosed. The film structure contains at least one layer of a blend of a substantially linear ethylene polymer or a homogeneously branched ethylene polymer and a high pressure low density polyethylene as a seal layer. In addition, the film structure contains a pigment to render the film structure opaque.

U.S. Patent 5,360,648 to Rivett et al. discloses a heat-sealable, multilayer film containing a colorant and method for making a package with such film. In particular, the multilayer film includes:

a. a first layer comprising a material having a melting point of at least 145°C.;

b. a second layer comprising a colorant blended with a polymer having a vicat softening point ranging from 100°C to 140°C;

c. a third layer comprising a material having a melting point of at least 135°C; and

d. a fourth layer comprising a material which is capable of forming a heat-seal,

wherein the second layer is positioned between the first and third layers and the fourth layer is an exterior layer.

The art has not provided packages for flowable materials having the unique combination of both good seal and good tear properties. The prior art packages appear to be lacking in that packages with good seal properties have not had good tear properties, and packages with good tear properties have not had good seal properties. Accordingly, there is a need in the art of flowable material packaging for a package which has good seal and good tear properties, can be produced in a cost-efficient manner and is easy to process.

Summary of the Invention

The present invention provides a multilayer film structure having at least two layers comprising:

(a) A first layer comprising poly(ethylene) or blended poly(ethylene) wherein said poly(ethylene) is selected from poly(ethylenes) having a density from about 0.93 g/cc to about 0.97 g/cc; and

(b) A second layer comprising a poly(ethylene) or a blended poly(ethylene) wherein said second layer poly(ethylene) has a density range from about 0.89 g/cc to about 0.93 g/cc and wherein said second layer is capable of forming a heat seal.

The first layer may optionally comprise colorants and/or fillers. Also, the first layer may optionally comprise two layers in the film structure, each of the two layers comprising at least one identical poly(ethylene) or blended poly(ethylene), with either or both of the two layers comprising any of the following: colorants, fillers, and regrind of the entire multilayer film.

The invention also provides a package and a method for making a package comprising the steps of providing a multilayer film structure as described above or laminating said multilayer film structure to another film structure or a packaging film component to form a complete package for the containment of a product such as flowable materials. The film structures of the present invention are particularly useful as packages for flowable and dispensable materials. Flowable materials include, but are not limited to, food products such as honey, mustard, ketchup, mayonnaise, salad dressings, and sauces; and personal use products such as shampoo, hair conditioners and lotions.

Brief Description of the Drawings

Figure 1 is a package for flowable materials made according to the present invention.

Figure 2 is a film structure according to the present invention having a three layer film structure.

Figure 3 is a film structure of the present invention having the film structure of Figure 2, an adhesive layer, an ink layer and a polyester layer.

Definitions

"*Blended poly(ethylene)*" refers to the combination of two or more poly(ethylenes).

"*Coextrusion*" or "*coextrude*," and the like refer to the process of extruding two or more materials combined in a single die so that the extrudate merges welded together into a laminar structure before chilling, i.e., quenching. Coextrusion can be employed in film blowing, free film extrusions, and extrusion coating processes.

"*Density*" refers to the weight to matter per unit volume of a substance as determined by ASTM D-2839, D-1505.

"*Fillers*" refers to inorganic particles such as talc and calcium carbonate.

"*Heat-seal*" refers to the union of two films by bringing the films into contact, or at least close proximity, with one another and then applying sufficient heat and pressure to a predetermined area (or areas) of the films to cause the contacting surfaces of the films in the predetermined area to become molten and intermix with one another, thereby forming an essentially inseparable bond between the two films in the predetermined area when the heat and pressure are removed therefrom and the area is allowed to cool.

"*Layer*" refers to a discrete film component, which is coextensive with the film and has a substantially uniform composition.

"*Multilayer film*" means a thermoplastic material generally in sheet or web form having one or more layers formed from polymeric materials which are bonded together by any conventional means known in the art (i.e., coextrusion, extrusion coating, and lamination, vapor deposition coating, solvent coating, emulsion coating, or suspension coating.

"*Poly(ethylenes)*" refers to a family of resins obtained by polymerizing the gas ethylene, C_2H_4. By varying the catalysts and methods of polymerization, properties such as density, melt index, crystallinity, degree of branching and crosslinking, molecular weight and molecular weight distribution can be regulated over wide ranges. Further modifications are obtained by copolymerization, chlorination and compounding additives. This includes resins such as the ethylene alpha-olefin copolymers which designate copolymers of ethylene

with one or more comonomers selected from C_3 to C_{20} alpha-olefins such as 1-butene, 1-pentene, 1-hexene, 1-octene, methyl pentene and the like; the term "poly(ethylene)" is also meant to include homogeneous polymers such as metallocene catalyzed linear homogeneous ethylene/alpha olefin copolymers. The homogeneous polymers can also be prepared using other single-site type catalysts.

"*Polymer*" or "*polymeric*" means the product of polymerization and includes but is not limited to homopolymers, monopolymers, copolymers, interpolymers, terpolymers, block copolymers, graft copolymers, and addition copolymers.

"*Processing aid*" means a substance or material incorporated in a film or film layer to increase the flexibility, workability, or extrudability of the film. These substances include both monomeric plasticizers and polymeric plasticizers and are generally those materials, which function by reducing the normal intermolecular forces in a resin thus permitting the macromolecules to slide over one another more freely. The art refers to many plasticizers as stabilizers. Thus, the terms, "plasticizer" and "stabilizer" are intended to be used interchangeably herein.

"*Regrind*" refers to the "spent" or discarded portions of a film structure, which are reused to make up a portion of the film layers or structure.

"*Tear*" refers to fracturing of film in a controlled manner to open a package by the application of digital force.

Detailed Description of the Invention

Figure 1 shows a complete package for flowable materials made according to the present invention.

Figure 2 shows a three-layer film structure according to the invention wherein the third layer of said film structure is capable of forming a heat seal.

First layer (1) comprises poly(ethylene) or blended poly(ethylene) wherein the poly(ethylene) has a density range from about 0.93 g/cc to about 0.97 g/cc. Poly(ethylenes) having this density range are exemplified by medium density poly(ethylene) (MDPE) and high-density poly(ethylene) (HDPE). A preferred density range for the poly(ethylene) of said layer is from about 0.94 g/cc to about 0.965 g/cc. Poly(ethylenes) having this density

range are exemplified by HDPE. A particularly preferred poly(ethylene) for said first layer is high density poly(ethylene) (HDPE) having a density of about 0.96 g/cc. HDPE can further be exemplified by Equistar M-6060.

The first layer may optionally contain a colorant. Colorants suitable for practice in this invention can be exemplified by Ampacet KM82199. The first layer may also optionally contain processing aids and/or fillers. In a preferred embodiment of the present invention the poly(ethylene) in the first layer comprises about 80% to about 100% of the total layer. If a colorant is present, the colorant comprises from about 0% to about 20% of the total layer. Unless otherwise specified, percentages as used herein are by weight.

Second layer (2) which is a duplicate of the first layer (1) comprises poly(ethylene or blended poly(ethylene) wherein the poly(ethylene) has a density range from about 0.93 g/cc to about 0.97 g/cc. Poly(ethylenes) having this density range are exemplified by medium density poly(ethylene) (MDPE) and high-density poly(ethylene) (HDPE). A preferred density range for the poly(ethylene) of said layer is from about 0.94 g/cc to about 0.965 g/cc. Poly(ethylenes) having this density range are exemplified by HDPE A particularly preferred poly(ethylene) for said second layer is high density poly(ethylene) (HDPE) having a density of about 0.96 g/cc. HDPE can further be exemplified by Equistar M-6060.

The second layer may optionally contain a colorant. Colorants suitable for practice in this invention can be exemplified by Ampacet KM82199. The second layer can also optionally contain processing aids and/or fillers. In a preferred embodiment of the present invention the poly(ethylene) in the second layer comprises about 70% to about 100% of the total layer. If a colorant is present, the colorant comprises from about 0% to about 30% of the total layer.

Layers 1 and/or 2 may optionally contain from about 0% to about 40% of regrind.

Third layer (3) comprises poly(ethylenes) or blended (poly(ethylenes) wherein the poly(ethylene) has a density range from about 0.89 g/cc to about 0.93 g/cc. Poly(ethylenes) having this density range are exemplified by low density poly(ethylene) (LDPE), linear low density poly(ethylene) (LLDPE), very low density poly(ethylene) (VLDPE) and metallocene catalyzed homogeneous low density polyethylene) (mLDPE) and plastomers. A preferred density range for the poly(ethylenes) of said third layer are about 0.90 g/cc to about 0.925

g/cc. Poly(ethylenes) having this density range are exemplified by LDPE, LLDPE, VLDPE, mLDPE and plastomers. A particularly preferred poly(ethylene) blend for said third layer is a blend of plastomer having a density of about 0.911g/cc and LDPE having a density of about 0.921 g/cc. A preferred plastomer can further be exemplified by Dow PT1409. A preferred LDPE can be further exemplified by Exxon LD-135.09.

Suitable colorants include pigments and dyes, especially those which are incorporated in a color concentrate, i.e. a compounded blend of a resin and generally a high percentage of either pigment or dye. The color concentrate is diluted during coextrusion by mixing the concentrate with the primary resin (i.e., one of the polymers listed above as suitable for the first or/and second layers). Preferably the resin portion of the color concentrate is compatible with the polymeric material selected for use in the first and/or second layers.

Layers 1, 2 and 3 of the three-layer film structure may have individual thicknesses ranging from about 0.07 mils to about 2.50 mils. The first layer may have a thickness ranging from about 0.07 mils to about 0.70 mils. The second layer may have a thickness ranging from about 0.60 mils to about 2.50 mils. The third layer may have a thickness ranging from about 0.45 mils to about 1.75 mils. The thickness for the entire three-layer film structure may range from about 1.0 mil to about 5.0 mils.

Preferably, the polymeric material, which comprises the first layer of the film structure of Figure 2, is no greater than about 20% of the total thickness of the film structure. The polymeric material, which comprises the second layer of the film structure of Figure 2, is no greater than about 70% of the total thickness of the film structure. The polymeric material, which comprises the third layer of the film structure, is no greater than about 50% of the total thickness of the film structure. Most preferably, the first layer of the film structure is about 10% of the film structure, the second layer is about 60%, and the third layer is about 30% of the total thickness of the structure.

Various additives may be used in any or all layers of the multilayer film structures. These additives are collectively known as processing aids and fillers.

Additional layers can be added to the multilayer film structures of the invention as desired. For example, in another embodiment of the invention, tie or adhesive layers may

be added to the film structures of the invention in order to bond or laminate said film structures to another film structure. An ink layer or printing may also be added to the film structures of the invention such as by surface or stamp printing.

Polymeric materials suitable for use in film structures which may be laminated to the film structures of the invention are exemplified by oriented poly (ethylene terephthalate) (PET), oriented poly (propylene) (PP) oriented nylon, which can be exemplified by Nylon 6, and coated or uncoated cellophanes. The oriented PET, oriented PP, and oriented nylon may also have a barrier coating wherein the barrier component may be SIOX, PVdC or a metallized coating.

In a particularly preferred embodiment of the present invention, which is represented by Figure 3, the multilayer film structure is laminated to a plain or printed film structure comprising an adhesive layer wherein the adhesive material is exemplified by urethane; an ink layer; and a polyester layer.

The multilayer film structures of the invention may be laminated to another film structure or a packaging film component by any suitable means including adhesive lamination, thermal lamination, and extrusion lamination, with adhesive lamination being preferred. The coextruded film may be produced by any suitable coextrusion method, including blown and cast extrusion. A preferred method for preparing the multilayer film is cast extrusion.

The multilayer film structures of the present invention provide a package having a quick-setting seal at relatively low temperatures. This quick-setting seal property allows for high speeds on vertical or horizontal form/fill/seal packaging machines. The multilayer film structures also provide packages that will tear open easily. The multilayer film structures of the present invention further provide a package having adequate moisture and oxygen barrier, seal integrity, tear easibility, and flex crack resistance. The packages of the present invention also afford the product contained therein an optimal shelf life.

In the following examples the production of a film structure of the present invention is described.

Example 1

A multilayer film, shown in Table I, was made having a sealant layer which is a blend of a plastomer (Dow PT1409) at 30% LLDPE (Exxon LD-135.09) at 65%, and a slip concentrate (Ampacet 10090) at 5%; an outside layer which is a blend of white concentrate (Ampacet KM82199) at 20% and an HDPE resin (Equistar M-6060) at 80%; and a middle layer which is a blend of white concentrate (Ampacet KM82199) at 25% and an HDPE resin (Equistar M-6060) at 75%. Optionally, the middle layer may contain a regrind of the overall multilayer film described above at about 0% to about 40%, replacing the HDPE component.

Each blend was plasticated and melt extruded through three separate extruders into a three-layer die and cooled on a matte chill roll on conventional cast film equipment. The resulting film was then laminated to plain or printed oriented films using common laminating techniques such as adhesive or extrusion lamination. The following chart represents the product of this Example.

TABLE I

MULTILAYER FILM

	Resin	Film Density (g/cc)	% of Layer	% of Web	Layer Caliper (mil)
Layer 1	Equistar M-6060 HDPE	0.960	80.0%	10.0%	0.15
	Ampacet KM82199	1.530	20.0%		
Layer 2	Equistar M-6060 HDPE (+ Regrind)	0.960	75.0%	60.0%	0.90
	Ampacet KM82199	1.530	25.0%		
Layer 3	Exxon LD-135.09	0.921	65.0%	30.0%	0.45
	Dow PT1409	0.911	30.0%		
	Ampacet 10090	0.920	5.0%		
TOTAL					**1.50**

Example 2

The multilayer film structure of Example 1 was laminated to a 48 gauge PET using a urethane adhesive. When compared to existing structures in the field of packaging for flowable materials such as a 48 gauge PET adhesive-laminated to a monolayer MDPE sealant film or a 48 gauge PET adhesive-laminated to a monolayer LLDPE sealant film, the multilayer film structure of the invention sealed at temperatures equivalent to or lower than the LLDPE film, while having at least the same or better than the tear properties of the MDPE film.

WE CLAIM:

1. A multilayer film structure having at least two layers comprising:

   (a) A first layer comprising poly(ethylene) or blended poly(ethylene) wherein said first layer poly(ethylene) is selected from poly(ethylenes) having a density from about 0.93 g/cc to 0.97 g/cc; and

   (b) A second layer comprising poly(ethylene) or blended poly(ethylene) wherein said second layer poly(ethylene) is selected from poly(ethylenes) having a density range from about 0.89 g/cc to 0.93 g/cc and wherein said second layer is capable of forming a heat seal.

2. The multilayer film of claim 1 wherein said first layer comprises two layers, each layer comprising at least one identical poly(ethylene) or blended poly(ethylene).

3. The multilayer film of claim 1 wherein said first layer further comprises a colorant.

4. The multilayer film of claim 1 wherein said first layer further comprises a filler.

5. The multilayer film of claim 1 wherein said first layer further comprises a regrind of the entire multilayer film structure.

6. The multilayer film of claim 2 wherein one or both of said two layers comprises a colorant.

7. The multilayer film of claim 2 wherein one or both of said two layers comprises a filler.

8. The multilayer film of claim 2 wherein one or both of said two layers comprises a regrind of the entire multilayer film structure.

9. The multilayer film of claim 1 wherein said first layer poly(ethylene) is selected from poly(ethylenes) having a density from about 0.94 g/cc to about 0.965 g/cc.

10. The multilayer film of claim 1 wherein said first layer poly(ethylene) comprises HDPE.

11. The multilayer film of claim 10 wherein said HDPE has a density of about 0.96 g/cc.

12. The multilayer film of claim 1 wherein said second layer poly(ethylene) is selected from polyethylenes having a density from about 0.90 g/cc to about 0.925 g/cc.

13. The multilayer film of claim 1 wherein said second layer poly(ethylene) comprises a blend of plastomer and LDPE.

14. The multilayer film of claim 13 wherein said plastomer has a density of about .911 g/cc and said LDPE has a density of about .921 g/cc.

15. The multilayer film of claim 1 wherein said multilayer film is laminated to at least one other film structure.

16. The multilayer film of claim 2 wherein said multilayer film is laminated to at least one other film structure.

17. The multilayer film of claim 15 wherein said other film structure comprises a polymeric material selected from the group consisting of oriented PET, oriented polypropylene, oriented polyethylene, oriented nylon, coated cellophanes and uncoated cellophanes.

18. The multilayer film of claim 17 wherein the oriented PET is coated with a barrier resin.

19. The multilayer film of claim 17 wherein the oriented polypropylene is coated with a barrier resin.

20. The multilayer film of claim 17 wherein the oriented nylon is coated with a barrier resin.

21. A package made from the multilayer film of claim 1.

22. A package made from the multilayer film of claim 2.

23. A method of making a package comprising: (1) providing a multilayer film having:

(a) A first layer comprising a poly(ethylene) or a blended poly(ethylene) wherein said first layer poly(ethylene) is selected from poly(ethylenes) having a density from about 0.93 g/cc to about 0.97 g/cc;

(b) A second layer comprising a poly(ethylene) or a blended poly(ethylene) wherein said second layer poly(ethylene) has a density range from about 0.89 g/cc to about 0.93 g/cc and wherein said second layer is capable of forming a heat seal; and

(2) laminating said multilayer film structure to another film structure or a packaging component to form a package.

24. A method of making a package comprising: (1) providing a multilayer film having:

(a) A first layer comprising poly(ethylene) or a blended poly(ethylene) wherein said poly(ethylene) has a density range from about 0.93 g/cc to 0.97 g/cc and wherein said first layer may optionally contain a color pigment and/or filler;

(b) A second layer comprising poly(ethylene) or a blended poly(ethylene) wherein said poly(ethylene) has a density range from about 0.93 g/cc to 0.97 g/cc and wherein said second layer may optionally contain a color pigment and/or a filler; and

(c) A third layer comprising poly(ethylene) or a blended poly(ethylene) wherein said poly(ethylene) has a density range from about 0.89 g/cc to 0.93 g/cc and wherein said third layer is capable of forming a heat seal; and

(2) laminating said multilayer film structure to another film structure or a packaging component to form a package.

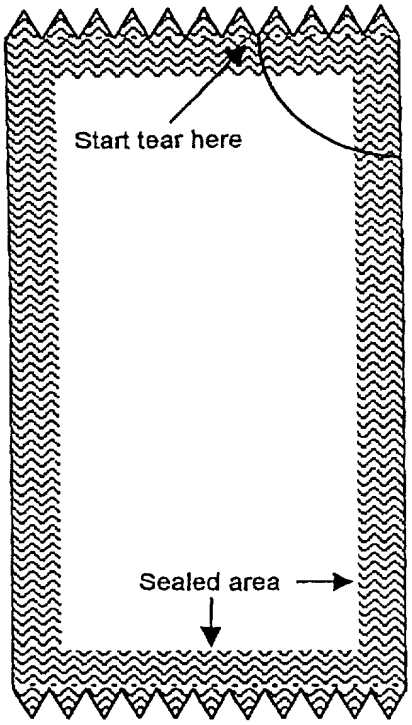
25. A package for flowable material comprising: (1) a first multilayer film structure comprising: (a) a first layer comprising poly(ethylene) or a blended poly(ethylene) wherein said poly(ethylene) has a density range from about 0.93 g/cc to 0.97 g/cc and wherein said first layer may optionally contain a color pigment, and/or a filler; (b) a second layer comprising poly(ethylene) or a blended poly(ethylene) wherein said poly(ethylene) has a density range from about 0.93 g/cc to 0.97 g/cc and wherein said second layer may optionally contain a color pigment and/or a filler; and (c) a third layer comprising poly(ethylene) or a blended poly(ethylene) wherein said poly(ethylene) has a density range from about 0.89 g/cc to 0.93 g/cc and wherein said third layer is capable of forming a heat seal; and

(2) at least one other film structure capable of being laminated to said first multilayer film structure.

ABSTRACT

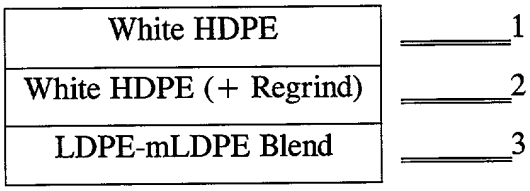
A multilayer film structure having at least two layers wherein the first layer comprises poly(ethylene) having a density range from about 0.93 g/cc to 0.97 g/cc; and a second layer comprising poly(ethylene) having a density range from 0.89 g/cc to 0.93 g/cc wherein the second layer is capable of forming a heat seal. The multilayer film structure is capable of being laminated to another film structure or a packaging film component. The packages of the present invention are useful for the packaging of flowable materials.

Figure 1



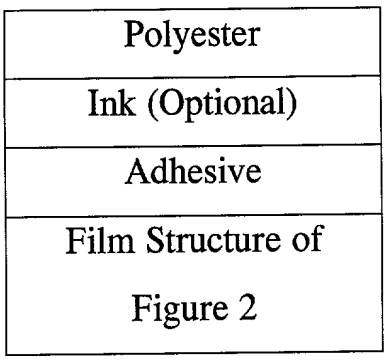
Package is grasped with two hands; one hand tears the corner of the package in a downward/horizontal motion to create a small opening through which product is dispensed. Any corner on the package can be torn away.

Figure 2



Three Layer Film Structure

Figure 3


Polyester
Ink (Optional)
Adhesive
Film Structure of
Figure 2

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

☒ Declaration Submitted with Initial Filing or ☐ Declartion Submitted After Initial Filing) *(Surcharge (37 CFR 1.16(e) required)*	*Attorney Docket No.*	24180-667000
	First Named Inventor	Genske
	COMPLETE IF KNOWN	
	Application No.	
	Filing Date	
	Group Art Unit	
	Examiner Name	

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled **MULTILAYER FILM STRUCTURES HAVING IMPROVED SEAL AND TEAR PROPERTIES**, the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT International application(s) designating at least one country other than the United States of America filed by me on the same subject matter having filing a date before that of the application(s) of which priority is claimed:

Prior Foreign Application(S)

Country	Number	Day/Month/ Year Filed	Priority Claimed Yes	No
None				

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application No.	Filing Date	Status (Patented, Pending, Abandoned)
None		

Applicant hereby appoints Joseph H. Paquin, Jr. (Reg. No. 31,647), Margaret M. Duncan (Reg. No. 30,879), John Bisbikis (Reg. No. 37,095), Tracy Thomas (Reg. 38,633), Matthew E. Leno (Reg. 41,149), and Joy Ann G. Serauskas (Reg. No. 27,952).of McDermott, WILL & EMERY, which has associated with it and with the power to appoint associate attorneys, as its attorneys, with full power of revocation, to prosecute this application, to transact all business in the U.S. Patent and Trademark Office and in the courts in connection therewith and to receive the Certificate of Registration

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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